

CLAIMS

What is claimed is:

1. A fluid transfer system comprising:

one or more tanks capable of holding said fluid;

an extendible and retractable hose for transferring said fluid, wherein said extendible and retractable hose has two ends, a first end in fluid communication with said one or more tanks, and a second end extendible so as to be capable of being in fluid communication with a receiving receptacle for transfer of said fluid, and;

wherein said second end is extended and retraced in response to gas pressure inside of said extendible and retractable hose.

2. The system of claim 1 wherein said extended second end of said extendible and retractable hose is retractable in response to gas pressure inside of said extendible and retractable hose.

3. The system of claim 1 wherein said fluid is a liquid.

4. The system of claim 3 wherein said liquid is selected from the group consisting of water, liquid waste, black water, grey water, effluent, and water containing waste materials.

5. The system of claim 1 wherein said system is located on a vehicle.

6. The system of claim 1 wherein said gas is air.

7. The system of claim 1 wherein said gas pressure is above local atmospheric pressure for extending said extendible and retractable hose.
8. The system of claim 1 wherein said gas pressure is below local atmospheric pressure for retracting said extendible and retractable hose.
9. The system of claim 1 further comprising venting ports selected from the group consisting of venting ports for said one or more tanks, and venting port for said extendible and retractable hose.
10. The system of claim 1 wherein said extendible and retractable hose is selected from the group consisting of an axially extendible and compressible hose, an accordion-type construction hose, an expandable and collapsible type hose, a hose having a spirally wound wall, a flexible hose having adjacent transverse accordion pleats, and a longitudinally extensible and compressible hose.
11. The system of claim 1 wherein said gas pressure is supplied from a pressurized gas tank.
12. The system of claim 7 wherein said above local atmospheric pressure is supplied from a pressurized gas tank.

13. The system of claim 8 wherein said below local atmospheric pressure is generated by a Venturi tube type device driven from a pressurized gas tank.

14. A vehicle waste transfer system comprising:

one or more tanks capable of holding said waste;

an extendible and retractable hose for transferring said waste, wherein said extendible and retractable hose has two ends, a first end in communication with said one or more tanks, and a second end extendible so as to be capable of transferring said waste a distance from said vehicle;

wherein said second end is extended in response to gas pressure applied to the inside of said extendible and retractable hose.

15. The system of claim 14 wherein said first end in communication with said one or more tanks is through one or more valves connected between said one or more tanks and said first end.

16. The system of claim 14 wherein said gas pressure is supplied from a tank of compressed air.

17. The system of claim 16 wherein said tank of compressed air has an input port and an output port, said input port in communication with a one-way valve for receiving air, and said output port in communication with a one-way valve for supplying air.

18. The system of claim 17 wherein said source of receiving air is selected from the group consisting of an on-vehicle air compressor, and an external connector for connection to a external source of compressed air.

19. The system of claim 14 further comprising a supporting member attached to said vehicle for supporting said extendible and retractable hose.

20. The system of claim 19 wherein said supporting member is a tube larger in diameter than diameter of said extendible and retractable hose.

21. The system of claim 19 further comprising a storage container for said extendible and retractable hose when in a retracted state.

22. A system for transferring liquid waste comprising:

one or more tanks capable of holding said liquid waste;

an extendible and retractable hose for transferring said liquid waste, wherein said extendible and retractable hose has two ends, a first end for receiving liquid waste from said one or more tanks, and a second end extendible a distance from said vehicle so as to be capable of transferring said received liquid waste;

wherein said second end is extendible and retractable in response to gas pressure applied to the inside of said extendible and retractable hose.

23. The system of claim 22 further comprising a support device through which said extendible and retractable hose may extend and retract without substantial resistance.

24. The system of claim 22 wherein said extendible and retractable hose when transferring said liquid waste has said second end at an equal or lower elevation than said first end.